(54) Title: METHOD AND APPARATUS FOR GENERATING CONFIGURATION DATA
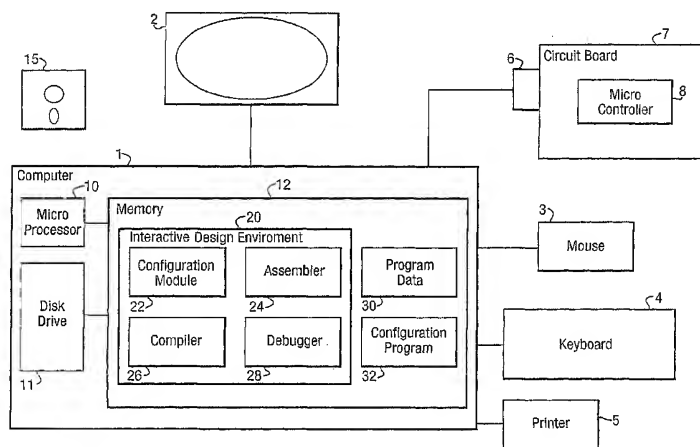
(57) Abstract: A computer system (1) is described for programming and testing microcontrollers (8). The computer System (1)
includes an interactive design environment (20) comprising a configuration module (22), an assembler (24), a compiler (26) and a
debugger (28). The compiler (26), assembler (24) and debugger (28) all enable high level program data (30) to be converted into
binary code and stored within a program store to control the functioning of a CPU included within a micro-controller (8). The con-
figuration module (22) is such to enable a user to generate a configuration program (30) for storing values in registers for controlling
the settings of inbuilt peripherals in the micro-controller (8) and the routing of signals to and from the peripherals. The register
values for routing signals are identified in a two stage process. Firstly utilising the configuration module (22) a user identifies which
peripherals are to be enabled. A user interface is then generated to illustrate possible configurations for routing the signals necessary
for the identified set of peripherals. A user can then select which of the identified sets of configuration data should be used to generate
a configuration program (20).